

Localised leak detection for containers or housings

Patent number: DE19535720
Publication date: 1997-03-27
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Classification:
- **international:** G01M3/32; G01M3/38
- **european:** G01M3/24; G01M3/38
Application number: DE19951035720 19950926
Priority number(s): DE19951035720 19950926

Abstract of DE19535720

The method provides localised testing for leaks in containers and/or housings. A test fluid acts on test object. The fluid is pressurised relative to surroundings such that when there is a leak, fluid leaks out from the test object. The point of the leak may be illuminated by light. The test fluid and the light are matched to each other such that the photoacoustic effect can appear. The resulting sound signal can then be detected by sound detector. The test object is only partly illuminated by a spatially limited light bundle. The incident area of light bundle on test object is moved over all points to be examined. When there is a leak, photoacoustically generated sound is detected from the sound detector and characterising parameters are analysed. In dependence on the derived information signal level the characteristic properties of the light bundle are varied such that a closed feedback loop results. The existence of a leak is recognised from the closing of the loop. The location of leak is determined from position of light bundle.